Poster ID

W68

Nonrigid Structure from Motion in Trajectory Space

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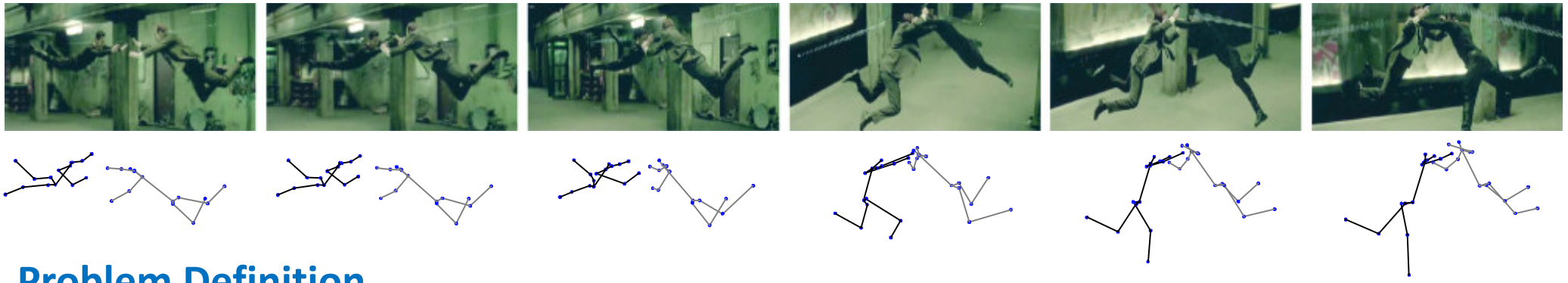


Problem Definition

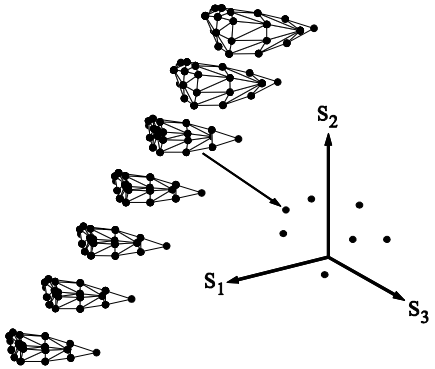
Reconstruction of **3D structure** of deforming objects from a video sequence taken from a moving camera.

Key Contributions

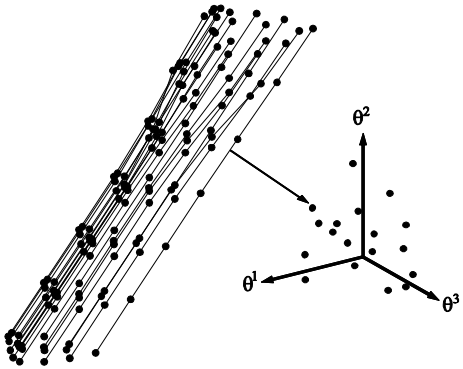
Demonstration that **temporal regularity** is sufficient to reconstruct structure.

Object-independent basis over trajectories which do not have to be estimated anew for each sequence.

Duality of trajectory basis and shape basis representations used in earlier literature.



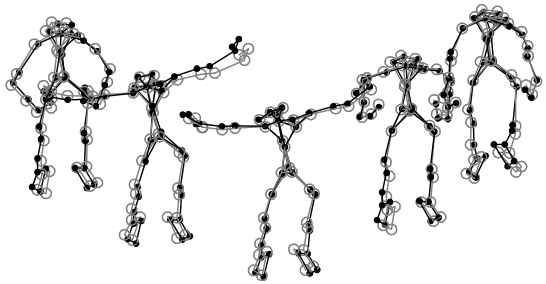
Shape Basis
as used in earlier literature



Trajectory Basis
for the same dataset

Comparison with Ground Truth

- Mocap Data
- Our Method



For more information , videos of results and code: **http://cvlab.lums.edu.pk/nrsfm**